

Welcome to STN International! Enter x:x

LOGINID:

Welcome to STN International! Enter x:x

LOGINID:sssptaul25rxt

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

NEWS	1		Web Page URLs for STN Seminar Schedule - N. America
NEWS	2		"Ask CAS" for self-help around the clock
NEWS	3	Jun 03	New e-mail delivery for search results now available
NEWS	4	Aug 08	PHARMAMarketLetter(PHARMAML) - new on STN
NEWS	5	Aug 19	Aquatic Toxicity Information Retrieval (AQUIRE) now available on STN
NEWS	6	Aug 26	Sequence searching in REGISTRY enhanced
NEWS	7	Sep 03	JAPIO has been reloaded and enhanced
NEWS	8	Sep 16	Experimental properties added to the REGISTRY file
NEWS	9	Sep 16	CA Section Thesaurus available in CAPLUS and CA
NEWS	10	Oct 01	CASREACT Enriched with Reactions from 1907 to 1985
NEWS	11	Oct 24	BEILSTEIN adds new search fields
NEWS	12	Oct 24	Nutraceuticals International (NUTRACEUT) now available on STN
NEWS	13	Nov 18	DKILIT has been renamed APOLLIT
NEWS	14	Nov 25	More calculated properties added to REGISTRY
NEWS	15	Dec 04	CSA files on STN
NEWS	16	Dec 17	PCTFULL now covers WP/PCT Applications from 1978 to date
NEWS	17	Dec 17	TOXCENTER enhanced with additional content
NEWS	18	Dec 17	Adis Clinical Trials Insight now available on STN
NEWS	19	Jan 29	Simultaneous left and right truncation added to COMPENDEX, ENERGY, INSPEC
NEWS	20	Feb 13	CANCERLIT is no longer being updated
NEWS	21	Feb 24	METADEx enhancements
NEWS	22	Feb 24	PCTGEN now available on STN
NEWS	23	Feb 24	TEMA now available on STN
NEWS	24	Feb 26	NTIS now allows simultaneous left and right truncation
NEWS	25	Feb 26	PCTFULL now contains images
NEWS	26	Mar 04	SDI PACKAGE for monthly delivery of multifile SDI results
NEWS	27	Mar 20	EVENTLINE will be removed from STN
NEWS	28	Mar 24	PATDPAFULL now available on STN
NEWS	29	Mar 24	Additional information for trade-named substances without structures available in REGISTRY
NEWS	30	Apr 11	Display formats in DGENE enhanced
NEWS	31	Apr 14	MEDLINE Reload
NEWS	32	Apr 17	Polymer searching in REGISTRY enhanced
NEWS	33	Jun 13	Indexing from 1947 to 1956 added to records in CA/CAPLUS
NEWS	34	Apr 21	New current-awareness alert (SDI) frequency in WPIDS/WPINDEX/WPIX
NEWS	35	Apr 28	RDISCLOSURE now available on STN
NEWS	36	May 05	Pharmacokinetic information and systematic chemical names added to PHAR
NEWS	37	May 15	MEDLINE file segment of TOXCENTER reloaded
NEWS	38	May 15	Supporter information for ENCOMPAT and ENCOMPLIT updated

NEWS 39 May 16 CHEMREACT will be removed from STN
 NEWS 40 May 19 Simultaneous left and right truncation added to WSCA
 NEWS 41 May 19 RAPRA enhanced with new search field, simultaneous left and
 right truncation
 NEWS 42 Jun 06 Simultaneous left and right truncation added to CBNB
 NEWS 43 Jun 06 PASCAL enhanced with additional data
 NEWS 44 Jun 20 2003 edition of the FSTA Thesaurus is now available
 NEWS 45 Jun 25 HSDB has been reloaded

NEWS EXPRESS April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT
 MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
 AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003
 NEWS HOURS STN Operating Hours Plus Help Desk Availability
 NEWS INTER General Internet Information
 NEWS LOGIN Welcome Banner and News Items
 NEWS PHONE Direct Dial and Telecommunication Network Access to STN
 NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that
 specific topic.

All use of STN is subject to the provisions of the STN Customer
 agreement. Please note that this agreement limits use to scientific
 research. Use for software development or design or implementation
 of commercial gateways or other similar uses is prohibited and may
 result in loss of user privileges and other penalties.

* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 12:35:36 ON 25 JUN 2003

=> file reg

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 12:35:56 ON 25 JUN 2003

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2003 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
 provided by InfoChem.

STRUCTURE FILE UPDATES: 24 JUN 2003 HIGHEST RN 536971-45-6

DICTIONARY FILE UPDATES: 24 JUN 2003 HIGHEST RN 536971-45-6

TSKA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when
 conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP
 PROPERTIES for more information. See STNote 27, Searching Properties
 in the CAS Registry File, for complete details:

<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> e mycophenolic

E1	1	MYCOPHENOLAMIDE/BI
E2	8	MYCOPHENOLATE/BI

```

E3      10 --> MYCOPHENOLIC/BI
E4      9      MYCOPHILUS/BI
E5      1      MYCOPHYT/BI
E6      14     MYCOPLANA/BI
E7      44     MYCOPLANECIN/BI
E8      1      MYCOPLANECINUS/BI
E9      3      MYCOPLAS/BI
E10     7098   MYCOPLASMA/BI
E11     1      MYCOPLASMAS/BI
E12     1      MYCOPLASMASIN/BI

```

=> s e3

```
L1      10 MYCOPHENOLIC/BI
```

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	5.02	5.23

FILE 'CAPLUS' ENTERED AT 12:37:00 ON 25 JUN 2003
 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
 COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 25 Jun 2003 VOL 138 ISS 26
 FILE LAST UPDATED: 24 Jun 2003 (20030624/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l1

```
L2      799 L1
```

=> s hiv or retroviral

```
49886 HIV
```

```
13518 RETROVIRAL
```

```
L3      61070 HIV OR RETROVIRAL
```

=> s l2 and l3

MISSING OPERATOR L2 ANDL3

The search profile that was entered contains terms or nested terms that are not separated by a logical operator.

=> s l2 and l3

```
L4      21 L2 AND L3
```

=> d l4 10-21

```
L4      ANSWER 10 OF 21  CAPLUS  COPYRIGHT 2003 ACS
AN      2000:502615  CAPLUS
```

DN 133:171813
 TI Effects of mycophenolic acid on human immunodeficiency virus infection in vitro and in vivo
 AU Chapuis, Aude G.; Rizzardi, G. Paolo; D'Agostino, Claudia; Attinger, Antoine; Knabenhans, Christian; Fleury, Sylvain; Acha-Orbea, Hans; Pantaleo, Giuseppe
 CS Laboratory of AIDS Immunopathogenesis, Department of Medicine, Division of Infectious Diseases, Centre Hospitalier Universitaire Vaudois, University of Lausanne, Lausammne, 1011, Switz.
 SO Nature Medicine (New York) (2000), 6(7), 762-768
 CODEN: NAMEFI; ISSN: 1078-8956
 PB Nature America Inc.
 DT Journal
 LA English
 RE.CNT 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 11 OF 21 CAPLUS COPYRIGHT 2003 ACS
 AN 2000:431967 CAPLUS
 DN 133:261112
 TI Abacavir in combination with the inosine monophosphate dehydrogenase (IMPDH)-inhibitor mycophenolic acid is active against multidrug-resistant HIV-1
 AU Heredia, Alonso; Margolis, David; Oldach, David; Hazen, Richard; Le, Nhut; Redfield, Robert
 CS Institute of Human Virology, University of Maryland Biotechnology Institute, University of Maryland, Baltimore, MD, USA
 SO JAIDS, Journal of Acquired Immune Deficiency Syndromes (1999), 22(4), 406-407
 CODEN: JJASFJ
 PB Lippincott Williams & Wilkins
 DT Journal
 LA English
 RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 12 OF 21 CAPLUS COPYRIGHT 2003 ACS
 AN 2000:402042 CAPLUS
 DN 133:39138
 TI Cell cycle regulating centrosomin CNN-4 and its gene from Drosophila melanogaster
 IN Kaufman, Thomas C.; Megraw, Timothy L.; Cecil, Jeffrey K.
 PA Advanced Research and Technology Institute, USA
 SO PCT Int. Appl., 117 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	WO 2000034524	A1	20000615	WO 1999-US29251	19991208
	W:				
	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW:				
	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				

PRAI US 1998-111823P P 19981211
 RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 13 OF 21 CAPLUS COPYRIGHT 2003 ACS
 AN 2000:339739 CAPLUS
 DN 133:202773
 TI Abacavir and mycophenolic acid, an inhibitor of inosine monophosphate dehydrogenase, have profound and synergistic anti-**HIV** activity
 AU Margolis, David; Heredia, Alonso; Gaywee, Jariyanart; Oldach, David; Drusano, George; Redfield, Robert
 CS University of Maryland Institute of Human Virology, Baltimore, MD, 21201, USA
 SO JAIDS, Journal of Acquired Immune Deficiency Syndromes (1999), 21(5), 362-370
 CODEN: JJASFJ
 PB Lippincott Williams & Wilkins
 DT Journal
 LA English
 RE.CNT 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 14 OF 21 CAPLUS COPYRIGHT 2003 ACS
 AN 1997:418518 CAPLUS
 DN 127:50464
 TI Computer-assisted design and synthesis of analogs of mycophenolic acid as antitumor and anti-**HIV** agents
 AU Makara, Gergely M.
 CS State Univ. of New York, Buffalo, NY, USA
 SO (1997) 173 pp. Avail.: UMI, Order No. DA9719149
 From: Diss. Abstr. Int., B 1997, 58(1), 206
 DT Dissertation
 LA English

L4 ANSWER 15 OF 21 CAPLUS COPYRIGHT 2003 ACS
 AN 1995:755015 CAPLUS
 DN 123:160186
 TI Polymerase substrate depletion: a novel strategy for inhibiting the replication of the human immunodeficiency virus
 AU Ichimura, Hiroshi; Levy, Jay A.
 CS Cancer Res. Inst., Univ. California, San Francisco, CA, 94143, USA
 SO Virology (1995), 211(2), 554-60
 CODEN: VIRLAX; ISSN: 0042-6822
 PB Academic
 DT Journal
 LA English

L4 ANSWER 16 OF 21 CAPLUS COPYRIGHT 2003 ACS
 AN 1994:182534 CAPLUS
 DN 120:182534
 TI Retrovirally transduced Escherichia coli gpt genes combine selectability with chemosensitivity capable of mediating tumor eradication
 AU Mroz, Paula J.; Moolten, Frederick L.
 CS Edith Nourse Rogers Mem. Veterans Hosp., Bedford, MA, 01730, USA
 SO Human Gene Therapy (1993), 4(5), 589-95
 CODEN: HGTHE3; ISSN: 1043-0342
 DT Journal
 LA English

L4 ANSWER 17 OF 21 CAPLUS COPYRIGHT 2003 ACS
 AN 1993:440505 CAPLUS
 DN 119:40505
 TI Polyionic compounds selectively alter availability of CD4 receptors for **HIV** coat protein rgp120

AU Aszalos, A.; Pine, P. S.; Weaver, J.
 CS Food and Drug Adm., Washington, DC, USA
 SO Mol. Aspects Chemother., Proc. Int. Symp., 3rd (1992), Meeting Date 1991,
 209-17. Editor(s): Shugar, David; Rode, Wojciech; Borowski, Edward.
 Publisher: Springer, Berlin, Germany.
 CODEN: 59CSAM
 DT Conference
 LA English

L4 ANSWER 18 OF 21 CAPLUS COPYRIGHT 2003 ACS
 AN 1991:505536 CAPLUS
 DN 115:105536
 TI Inhibitors of IMP dehydrogenase stimulate the phosphorylation of the
 anti-human immunodeficiency virus nucleosides 2',3'-dideoxyadenosine and
 2',3'-dideoxyinosine
 AU Hartman, Neil R.; Ahluwalia, Gurpreet S.; Cooney, David A.; Mitsuya,
 Hiroaki; Kageyama, Seiji; Fridland, Arnold; Broder, Samuel; Johns, David
 G.
 CS Lab. Med. Chem., Natl. Cancer Inst., Bethesda, MD, 20892, USA
 SO Molecular Pharmacology (1991), 40(1), 118-24
 CODEN: MOPMA3; ISSN: 0026-895X
 DT Journal
 LA English

L4 ANSWER 19 OF 21 CAPLUS COPYRIGHT 2003 ACS
 AN 1991:74748 CAPLUS
 DN 114:74748
 TI Polyionic compounds selectively alter availability of CD4 receptors for
 HIV coat protein rgp120
 AU Weaver, James L.; Gergely, Peter; Pine, P. Scott; Patzer, Eric; Aszalos,
 Adorjan
 CS Food and Drug Adm., Washington, DC, 20204, USA
 SO AIDS Research and Human Retroviruses (1990), 6(9), 1125-30
 CODEN: ARHRE7; ISSN: 0889-2229
 DT Journal
 LA English

L4 ANSWER 20 OF 21 CAPLUS COPYRIGHT 2003 ACS
 AN 1990:604479 CAPLUS
 DN 113:204479
 TI Inhibitors of IMP dehydrogenase stimulate the phosphorylation of the
 antiviral nucleoside 2',3'-dideoxyguanosine
 AU Ahluwalia, Gurpreet; Cooney, David A.; Bondoc, Laureano L., Jr.; Currens,
 Michael J.; Ford, Harry; Johns, David G.; Mitsuya, Hiroaki; Fridland,
 Arnold
 CS Div. Cancer Treat., Natl. Cancer Inst., Bethesda, MD, 20892, USA
 SO Biochemical and Biophysical Research Communications (1990), 171(3),
 1297-303
 CODEN: BBRCA9; ISSN: 0006-291X
 DT Journal
 LA English

L4 ANSWER 21 OF 21 CAPLUS COPYRIGHT 2003 ACS
 AN 1989:449969 CAPLUS
 DN 111:49969
 TI Inhibition of infectivity of human immunodeficiency virus by a novel
 nucleoside, oxetanocin, and related compounds
 AU Seki, Junichi; Shimada, Nobuyoshi; Takahashi, Katsutoshi; Takita,
 Tomohisa; Takeuchi, Tomio; Hoshino, Hiroo
 CS Sch. Med., Gunma Univ., Maebashi, 371, Japan
 SO Antimicrobial Agents and Chemotherapy (1989), 33(5), 773-5
 CODEN: AMACQJ; ISSN: 0066-4804

DT Journal
LA English

=> d 14 13 all

L4 ANSWER 13 OF 21 CAPLUS COPYRIGHT 2003 ACS
AN 2000:339739 CAPLUS
DN 133:202773
TI Abacavir and mycophenolic acid, an inhibitor of inosine monophosphate dehydrogenase, have profound and synergistic anti-HIV activity
AU Margolis, David; Heredia, Alonso; Gaywee, Jariyanart; Oldach, David; Drusano, George; Redfield, Robert
CS University of Maryland Institute of Human Virology, Baltimore, MD, 21201, USA
SO JAIDS, Journal of Acquired Immune Deficiency Syndromes (1999), 21(5), 362-370
CODEN: JJASFJ
PB Lippincott Williams & Wilkins
DT Journal
LA English
CC 1-7 (Pharmacology)
AB The use of inhibitors of purine nucleoside metab. has been advocated for the treatment of HIV-1 infection. Abacavir is the first clin. available guanosine analog HIV-1 reverse transcriptase inhibitor, and the most potent nucleoside analog yet developed. Mycophenolic acid (MA), a specific inhibitor of lymphocyte proliferation that is currently in use in organ transplantation, acts on inosine monophosphate dehydrogenase to block the conversion of inosine monophosphate to guanosine monophosphate. The authors found Abacavir and MA inhibited HIV-1 replication in stimulated peripheral blood mononuclear cells (PBMCs) and in monocyte-derived macrophages (MDMs). Inhibition was potent and synergistic to an extent not previously obsd. with other antiretroviral combinations. MA was effective at concns. (0.25 .mu.M) far below those used for immunosuppression in organ transplantation. An HIV strain encoding the M184V mutation was susceptible to the combination of MA and Abacavir. However, the combination of MA and zidovudine (ZDV) or stavudine (d4T) was antagonistic. Although the translation of these observations must be carefully evaluated in clin. trials, the judicious combination of antiretrovirals and inhibitors of nucleoside metab. may emerge as an important strategy in the treatment of HIV infection.
ST HIV inhibitor Abacavir mycophenolate
IT Human immunodeficiency virus 1
(profound and synergistic anti-HIV activity of Abacavir and mycophenolic acid)
IT Nucleosides, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(profound and synergistic anti-HIV activity of Abacavir and mycophenolic acid in relation to nucleoside metab.)
IT 9028-93-7, Inosine monophosphate dehydrogenase
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(profound and synergistic anti-HIV activity of Abacavir and mycophenolic acid)
IT 24280-93-1, Mycophenolic acid 136470-78-5, Abacavir
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(profound and synergistic anti-HIV activity of Abacavir and mycophenolic acid)
RE.CNT 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

- (1) Allison, A; Ann NY Acad Sci 1993, V696, P63 CAPLUS
- (2) Allison, A; Transplant Proc 1991, V23(Suppl 2), P10
- (3) Anon; ACTG virology manual 1994
- (4) Anon; Ziagen package insert 1999
- (5) Baba, M; Antimicrob Agents Chemother 1987, V31, P1613 CAPLUS
- (6) Barti, P; Presented at the 6th Conference on Retroviruses and Opportunistic Infections 1999
- (7) Bianchi, V; Proc Natl Acad Sci USA 1994, V91, P8403 CAPLUS
- (8) Biron, F; Antiviral Res 1996, V29, P111 CAPLUS
- (9) Biron, F; J Acquir Immune Defic Syndr Hum Retrovirol 1995, V10, P36 CAPLUS
- (10) Bullingham, R; Transplant Proc 1996, V28, P925 CAPLUS
- (11) Carr, S; J Biol Chem 1993, V268, P27286 CAPLUS
- (12) Change-Mayer, C; Ann Neurol 1988, V23, P558
- (13) Dayton, J; Mol Pharmacol 1994, V41, P671
- (14) De Boer, R; AIDS 1998, V12, P1567 MEDLINE
- (15) Drusano, G; Antimicrob Agents Chemother 1998, V42, P2153 CAPLUS
- (16) D'Argenio, D; ADAPT II: a program package for simulation identification and optimal experimental design 1990
- (17) Gao, W; Mol Pharmacol 1994, V46, P767 CAPLUS
- (18) Gao, W; Proc Natl Acad Sci USA 1993, V90, P8925 CAPLUS
- (19) Gao, W; Proc Natl Acad Sci USA 1995, V92, P8333 CAPLUS
- (20) Giacca, M; J Infect Dis 1996, V174, P204 CAPLUS
- (21) Greco, W; Pharmacol Rev 1995, V47, P331 MEDLINE
- (22) Harada, S; Science 1985, V229, P563 MEDLINE
- (23) Hartman, N; Mol Pharmacol 1991, V40, P118 CAPLUS
- (24) Ichimura, H; Virology 1995, V211, P554 CAPLUS
- (25) Johns, D; Biochem Pharmacol 1998, V55, P1551 CAPLUS
- (26) Lanier, R; Presented at the 6th Conference on Retroviruses and Opportunistic Infections 1999
- (27) Lori, F; AIDS Res Hum Retroviruses 1997, V13, P1403 CAPLUS
- (28) Lori, F; Science 1994, V266, P801 CAPLUS
- (29) Luzzati, R; J Antimicrob Chemother 1998, V42, P565 CAPLUS
- (30) Malley, S; Proc Natl Acad Sci USA 1994, V91, P11017 CAPLUS
- (31) Meyerhans, A; J Virol 1994, V68, P535 CAPLUS
- (32) Montaner, J; J Infect Dis 1997, V175, P801 CAPLUS
- (33) Neyts, J; Antimicrob Agents Chemother 1998, V42, P216 CAPLUS
- (34) Neyts, J; Antimicrob Agents Chemother 1998, V42, P3285 CAPLUS
- (35) Perno, C; Current Protocols in Immunology 1993, Suppl 5, P12.4.4
- (36) Popovic, M; Science 1984, V224, P497 MEDLINE
- (37) Roche Laboratories; Cellcept package insert 1998
- (38) Rutschmann, O; AIDS 1998, V12, P71 CAPLUS
- (39) Schinazy, R; Antimicrob Agents Chemother 1993, V37, P875
- (40) Staszewski, S; Presented at the 6th Conference on Retroviruses and Opportunistic Infections 1999
- (41) Tisdale, M; Antimicrob Agents Chemother 1997, V41, P1094 CAPLUS
- (42) Vila, J; Lancet 1996, V348, P203 MEDLINE
- (43) Vogt, M; Science 1987, V235, P1376 CAPLUS

=> d 14 15 all

L4 ANSWER 15 OF 21 CAPLUS COPYRIGHT 2003 ACS
 AN 1995:755015 CAPLUS
 DN 123:160186
 TI Polymerase substrate depletion: a novel strategy for inhibiting the replication of the human immunodeficiency virus
 AU Ichimura, Hiroshi; Levy, Jay A.
 CS Cancer Res. Inst., Univ. California, San Francisco, CA, 94143, USA
 SO Virology (1995), 211(2), 554-60
 CODEN: VIRLAX; ISSN: 0042-6822
 PB Academic
 DT Journal

LA English
 CC 1-5 (Pharmacology)
 AB Mycophenolic acid (MPA), an inhibitor of inosine monophosphate dehydrogenase, shows strong anti-**HIV** activity in vitro in both human peripheral blood CD4+ lymphocytes and macrophages, as well as established human cell lines. MPA shows its greatest antiviral effects during the early stages of **HIV** infection. By limiting the rate of de novo synthesis of guanosine nucleotides, this drug apparently blocks the activity of reverse transcriptase, which is required for the formation of the **HIV** DNA provirus. MPA provides a novel strategy for inhibiting the replication of **HIV** and should be considered in clin. trials of antiviral therapies.
 ST polymerase substrate depletion **HIV** replication; mycophenolic acid **HIV** inhibition reverse transcriptase
 IT Blood
 Lymphocyte
 Macrophage
 Virucides and Virustats
 (HIV-1 reverse transcriptase inhibition and polymerase substrate depletion by mycophenolic acid)
 IT Nucleotides, biological studies
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (inhibition of guanosine nucleotides by mycophenolic acid and anti-**HIV**-1 activity)
 IT Virus, animal
 (human immunodeficiency 1, **HIV**-1 reverse transcriptase inhibition and polymerase substrate depletion by mycophenolic acid)
 IT 24280-93-1, Mycophenolic acid
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (HIV-1 reverse transcriptase inhibition and polymerase substrate depletion by mycophenolic acid)
 IT 9068-38-6, Reverse transcriptase
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (HIV-1 reverse transcriptase inhibition and polymerase substrate depletion by mycophenolic acid)
 IT 118-00-3D, Guanosine, nucleotides
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (inhibition of guanosine nucleotides by mycophenolic acid and anti-**HIV**-1 activity)

=> d 14 20 all

L4 ANSWER 20 OF 21 CAPLUS COPYRIGHT 2003 ACS
 AN 1990:604479 CAPLUS
 DN 113:204479
 TI Inhibitors of IMP dehydrogenase stimulate the phosphorylation of the antiviral nucleoside 2',3'-dideoxyguanosine
 AU Ahluwalia, Gurpreet; Cooney, David A.; Bondoc, Laureano L., Jr.; Currens, Michael J.; Ford, Harry; Johns, David G.; Mitsuya, Hiroaki; Fridland, Arnold
 CS Div. Cancer Treat., Natl. Cancer Inst., Bethesda, MD, 20892, USA
 SO Biochemical and Biophysical Research Communications (1990), 171(3), 1297-303
 CODEN: BBRCA9; ISSN: 0006-291X
 DT Journal
 LA English

CC 1-5 (Pharmacology)

AB The inosinate dehydrogenase (IMPD) inhibitors ribavirin, tiazofurin and mycophenolic acid were found to stimulate by as much as 20-fold the anabolism of the anti-**HIV** agent 2',3'-dideoxyguanosine to its 5'-diphosphate (ddGDP) in a human T-cell culture system (Molt-4 cells). Stimulation of the further conversion to ddGTP (the active form of the drug) was lesser in magnitude but still highly significant (up to 4-fold at appropriate concns. of ribavirin or tiazofurin). In parallel with these increases, the inhibitors also produced increases of up to 35-fold in IMP levels. These results support the proposal that the initial phosphorylation of ddGuo is catalyzed by a phosphotransferase (5'-nucleotidase) which utilizes IMP as its phosphate donor (Johnson and Fridland, [1989] Molec. Pharmacol. 36, 291-295). Concomitant with this increase in 5'-phosphorylation of ddGuo, an increase in its anti-**HIV** activity of up to 6.5-fold was obsd. when this agent was combined with ribavirin (5.mu.M) in the CEM cell assay system.

ST antiviral nucleoside phosphorylation IMP dehydrogenase inhibitor;
inhibition dideoxyguanosine IMP dehydrogenase inhibitor

IT Lymphocyte
(T-, dideoxyguanosine phosphorylation by human, IMP dehydrogenase inhibitors stimulation of, **HIV** inhibition in relation to)

IT Virus, animal
(human immunodeficiency 1, III.beta., inhibition of, by dideoxyguanosine and IMP dehydrogenase inhibitors, in human T-lymphocytes)

IT Microbicidal and microbiostatic action
(virucidal, of dideoxyguanosine and IMP dehydrogenase inhibitors, in human T-lymphocytes)

IT 68726-28-3 84328-12-1 85956-71-4
RL: BIOL (Biological study)
(as dideoxyguanosine metabolite, in human T-lymphocytes, IMP dehydrogenase inhibitors effect on)

IT **24280-93-1**, NSC 129185 36791-04-5, NSC 163039 60084-10-8, NSC 286193
RL: BIOL (Biological study)
(dideoxyguanosine phosphorylation by T-lymphocytes of humans stimulation by, **HIV** inhibition in relation to)

IT 9028-93-7, IMP dehydrogenase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibitors, dideoxyguanosine phosphorylation by T-lymphocytes of humans stimulation by, **HIV** inhibition in relation to)

IT 131-99-7, IMP
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(metab. of, by T-lymphocytes of humans, dideoxyguanosine metab. response to IMP dehydrogenase inhibitors in relation to)

IT 85326-06-3
RL: BIOL (Biological study)
(phosphorylation of, by T-lymphocytes of humans, IMP dehydrogenase inhibitors stimulation of, **HIV** inhibition in relation to)

=> d 14 21 all

L4 ANSWER 21 OF 21 CAPLUS COPYRIGHT 2003 ACS

AN 1989:449969 CAPLUS

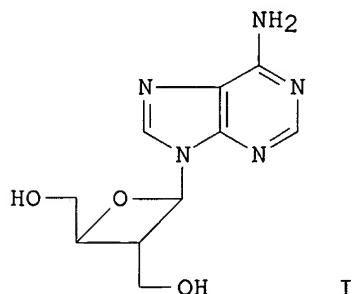
DN 111:49969

TI Inhibition of infectivity of human immunodeficiency virus by a novel nucleoside, oxetanocin, and related compounds

AU Seki, Junichi; Shimada, Nobuyoshi; Takahashi, Katsutoshi; Takita, Tomohisa; Takeuchi, Tomio; Hoshino, Hiroo

CS Sch. Med., Gunma Univ., Maebashi, 371, Japan

SO Antimicrobial Agents and Chemotherapy (1989), 33(5), 773-5
 CODEN: AMACCQ; ISSN: 0066-4804
 DT Journal
 LA English
 CC 1-5 (Pharmacology)
 GI



AB Oxetanocin A (I) is a novel nucleoside contg. a 4-membered sugar, oxetanosyl-N-glycoside, and adenine. The effects of oxetanocin and related compds. on the infectivity of human immunodeficiency virus (HIV) were examd. They inhibited HIV infectivity in vitro. Allopurinol and mycophenolic acid produced additive anti-HIV effects when added with these compds.

ST oxetanocin analog human immunodeficiency virus

IT Virus, animal
 (human immunodeficiency 1, inhibition of, by oxetanocin analogs, allopurinol and mycophenolic acid enhancement of)

IT 315-30-0 **24280-93-1**, Mycophenolic acid
 RL: BIOL (Biological study)
 (human immunodeficiency virus inhibition by oxetanocin analogs enhancement by)

IT 103913-16-2 113269-44-6 113269-45-7 113269-46-8 113296-23-4
 RL: BIOL (Biological study)
 (human immunodeficiency virus inhibition by, allopurinol and mycophenolic acid enhancement of)

=> d his

(FILE 'HOME' ENTERED AT 12:35:36 ON 25 JUN 2003)

FILE 'REGISTRY' ENTERED AT 12:35:56 ON 25 JUN 2003

E MYCOPHENOLIC

L1 10 S E3

FILE 'CAPLUS' ENTERED AT 12:37:00 ON 25 JUN 2003

L2 799 S L1

L3 61070 S HIV OR RETROVIRAL

L4 21 S L2 AND L3

=>

---Logging off of STN---

=>

Executing the logoff script...

=> LOG Y

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	30.59	35.82
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-2.60	-2.60

STN INTERNATIONAL LOGOFF AT 12:43:06 ON 25 JUN 2003

Welcome to STN International! Enter x:x

LOGINID:sssptaul25rxt

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

NEWS	1		Web Page URLs for STN Seminar Schedule - N. America
NEWS	2		"Ask CAS" for self-help around the clock
NEWS	3	Jun 03	New e-mail delivery for search results now available
NEWS	4	Aug 08	PHARMAMarketLetter(PHARMAML) - new on STN
NEWS	5	Aug 19	Aquatic Toxicity Information Retrieval (AQUIRE) now available on STN
NEWS	6	Aug 26	Sequence searching in REGISTRY enhanced
NEWS	7	Sep 03	JAPIO has been reloaded and enhanced
NEWS	8	Sep 16	Experimental properties added to the REGISTRY file
NEWS	9	Sep 16	CA Section Thesaurus available in CAPLUS and CA
NEWS	10	Oct 01	CASREACT Enriched with Reactions from 1907 to 1985
NEWS	11	Oct 24	BEILSTEIN adds new search fields
NEWS	12	Oct 24	Nutraceuticals International (NUTRACEUT) now available on STN
NEWS	13	Nov 18	DKILIT has been renamed APOLLIT
NEWS	14	Nov 25	More calculated properties added to REGISTRY
NEWS	15	Dec 04	CSA files on STN
NEWS	16	Dec 17	PCTFULL now covers WP/PCT Applications from 1978 to date
NEWS	17	Dec 17	TOXCENTER enhanced with additional content
NEWS	18	Dec 17	Adis Clinical Trials Insight now available on STN
NEWS	19	Jan 29	Simultaneous left and right truncation added to COMPENDEX, ENERGY, INSPEC
NEWS	20	Feb 13	CANCERLIT is no longer being updated
NEWS	21	Feb 24	METADEX enhancements
NEWS	22	Feb 24	PCTGEN now available on STN
NEWS	23	Feb 24	TEMA now available on STN
NEWS	24	Feb 26	NTIS now allows simultaneous left and right truncation
NEWS	25	Feb 26	PCTFULL now contains images
NEWS	26	Mar 04	SDI PACKAGE for monthly delivery of multifile SDI results
NEWS	27	Mar 20	EVENTLINE will be removed from STN
NEWS	28	Mar 24	PATDPAFULL now available on STN
NEWS	29	Mar 24	Additional information for trade-named substances without structures available in REGISTRY
NEWS	30	Apr 11	Display formats in DGENE enhanced
NEWS	31	Apr 14	MEDLINE Reload
NEWS	32	Apr 17	Polymer searching in REGISTRY enhanced
NEWS	33	Jun 13	Indexing from 1947 to 1956 added to records in CA/CAPLUS
NEWS	34	Apr 21	New current-awareness alert (SDI) frequency in WPIDS/WPINDEX/WPIX
NEWS	35	Apr 28	RDISCLOSURE now available on STN
NEWS	36	May 05	Pharmacokinetic information and systematic chemical names added to PHAR
NEWS	37	May 15	MEDLINE file segment of TOXCENTER reloaded
NEWS	38	May 15	Supporter information for ENCOMPPAT and ENCOMPLIT updated
NEWS	39	May 16	CHEMREACT will be removed from STN
NEWS	40	May 19	Simultaneous left and right truncation added to WSCA
NEWS	41	May 19	RAPRA enhanced with new search field, simultaneous left and right truncation
NEWS	42	Jun 06	Simultaneous left and right truncation added to CBNB
NEWS	43	Jun 06	PASCAL enhanced with additional data

NEWS 44 Jun 20 2003 edition of the FSTA Thesaurus is now available
NEWS 45 Jun 25 HSDB has been reloaded

NEWS EXPRESS April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT
MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003
NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS INTER General Internet Information
NEWS LOGIN Welcome Banner and News Items
NEWS PHONE Direct Dial and Telecommunication Network Access to STN
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that
specific topic.

All use of STN is subject to the provisions of the STN Customer
agreement. Please note that this agreement limits use to scientific
research. Use for software development or design or implementation
of commercial gateways or other similar uses is prohibited and may
result in loss of user privileges and other penalties.

* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 15:19:12 ON 25 JUN 2003

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 15:19:20 ON 25 JUN 2003

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2003 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 24 JUN 2003 HIGHEST RN 536971-45-6

DICTIONARY FILE UPDATES: 24 JUN 2003 HIGHEST RN 536971-45-6

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP
PROPERTIES for more information. See STNote 27, Searching Properties
in the CAS Registry File, for complete details:

<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> ribavirin

RIBAVIRIN IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system.

For a list of commands available to you in the current file, enter

"HELP COMMANDS" at an arrow prompt (=>).

=> s ribavirin

L1 17 RIBAVIRIN

=> file caplus
COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
4.62	4.83

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 15:19:41 ON 25 JUN 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 25 Jun 2003 VOL 138 ISS 26
FILE LAST UPDATED: 24 Jun 2003 (20030624/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l1

L2 1626 L1

=> s hiv or retroviral or retrovirus

49886 HIV

13518 RETROVIRAL

11616 RETROVIRUS

L3 66831 HIV OR RETROVIRAL OR RETROVIRUS

=> s l2 and l3

L4 118 L2 AND L3

=> d l4 90-118

L4 ANSWER 90 OF 118 CAPLUS COPYRIGHT 2003 ACS

AN 1992:98734 CAPLUS

DN 116:98734

TI Antiviral portrait series. Number 2. The activity of ribavirin against the human immunodeficiency virus: a review of laboratory and clinical experience

AU Snell, N. J. C.

CS Eur. Med. Aff. Dep., ICN Pharm., High Wycombe, HP13 7DL, UK

SO Antiviral Chemistry & Chemotherapy (1991), 2(5), 257-63

CODEN: ACCHEH; ISSN: 0956-3202

DT Journal; General Review

LA English

L4 ANSWER 91 OF 118 CAPLUS COPYRIGHT 2003 ACS

AN 1992:55426 CAPLUS

DN 116:55426

TI Differential inhibitory effects of sulfated polysaccharides and polymers on the replication of various myxoviruses and retroviruses, depending on the composition of the target amino acid sequences of the viral envelope glycoproteins

AU Hosoya, Mitsuaki; Balzarini, Jan; Shigeta, Shiro; De Clercq, Erik
 CS Rega Inst. Med. Res., Kathol. Univ. Leuven, Louvain, B-3000, Belg.
 SO Antimicrobial Agents and Chemotherapy (1991), 35(12), 2515-20
 CODEN: AMACCQ; ISSN: 0066-4804
 DT Journal
 LA English

L4 ANSWER 92 OF 118 CAPLUS COPYRIGHT 2003 ACS
 AN 1991:597811 CAPLUS
 DN 115:197811
 TI Mechanism of the potentiating effect of ribavirin on the activity of
 2',3'-dideoxyinosine against human immunodeficiency virus
 AU Balzarini, Jan; Lee, Chong Kyo; Herdewijn, Piet; De Clercq, Erik
 CS Rega Inst. Med. Res., Kathol. Univ., Louvain, B-3000, Belg.
 SO Journal of Biological Chemistry (1991), 266(32), 21509-14
 CODEN: JBCHA3; ISSN: 0021-9258
 DT Journal
 LA English

L4 ANSWER 93 OF 118 CAPLUS COPYRIGHT 2003 ACS
 AN 1991:526477 CAPLUS
 DN 115:126477
 TI 1-.beta.-D-Ribofuranosyl-1,2,4-triazole-3-carboxamide (ribavirin) and
 5-ethnlyl-1-.beta.-D-ribofuranosylimidazole-4-carboxamide (EICAR) markedly
 potentiate the inhibitory effect of 2',3'-dideoxyinosine on human
 immunodeficiency virus in peripheral blood lymphocytes
 AU Balzarini, Jan; Lee, Chong Kyo; Schols, Dominique; De Clercq, Erik
 CS Rega Inst. Med. Res., Kathol. Univ. Leuven, Louvain, B-3000, Belg.
 SO Biochemical and Biophysical Research Communications (1991), 178(2), 563-9
 CODEN: BBRCA9; ISSN: 0006-291X
 DT Journal
 LA English

L4 ANSWER 94 OF 118 CAPLUS COPYRIGHT 2003 ACS
 AN 1991:505536 CAPLUS
 DN 115:105536
 TI Inhibitors of IMP dehydrogenase stimulate the phosphorylation of the
 anti-human immunodeficiency virus nucleosides 2',3'-dideoxyadenosine and
 2',3'-dideoxyinosine
 AU Hartman, Neil R.; Ahluwalia, Gurpreet S.; Cooney, David A.; Mitsuya,
 Hiroaki; Kageyama, Seiji; Fridland, Arnold; Broder, Samuel; Johns, David
 G.
 CS Lab. Med. Chem., Natl. Cancer Inst., Bethesda, MD, 20892, USA
 SO Molecular Pharmacology (1991), 40(1), 118-24
 CODEN: MOPMA3; ISSN: 0026-895X
 DT Journal
 LA English

L4 ANSWER 95 OF 118 CAPLUS COPYRIGHT 2003 ACS
 AN 1991:484878 CAPLUS
 DN 115:84878
 TI Inhibition of human immunodeficiency virus type 1 replication by guanosine
 analogs and lack of synergistic antiviral effect of acyclovir with
 3'-azido-3'-deoxythymidine
 AU Smith, M. S.; Pagano, J. S.
 CS Lineberger Cancer Res. Cent., Univ. North Carolina, Chapel Hill, NC,
 27599, USA
 SO Antiviral Chemistry & Chemotherapy (1991), 2(1), 29-34
 CODEN: ACCHEH; ISSN: 0956-3202
 DT Journal
 LA English

L4 ANSWER 96 OF 118 CAPLUS COPYRIGHT 2003 ACS
 AN 1991:400777 CAPLUS
 DN 115:777
 TI Treatment of human **retroviral** infections with
 2',3'-dideoxyinosine
 IN Yarchoan, Robert; Mitsuya, Hiroaki; Broder, Samuel
 PA National Institutes of Health, USA
 SO U. S. Pat. Appl., 29 pp. Avail. NTIS Order No. PAT-APPL-7-460 490.
 CODEN: XAXXAV
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 460490	A0	19910201	US 1990-460490	19900103
	US 5026687	A	19910625		
	CA 2072573	AA	19910704	CA 1991-2072573	19910103
	CA 2072573	C	19960528		
	WO 9109605	A1	19910711	WO 1991-US5	19910103
	W: AU, CA, JP				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
	AU 9171757	A1	19910724	AU 1991-71757	19910103
	AU 643976	B2	19931202		
	EP 509019	A1	19921021	EP 1991-902028	19910103
	EP 509019	B1	19980715		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	JP 05506007	T2	19930902	JP 1991-502953	19910103
	JP 2829545	B2	19981125		
	AT 168268	E	19980815	AT 1991-902028	19910103
	ES 2125233	T3	19990301	ES 1991-902028	19910103
	US 5376642	A	19941227	US 1993-26188	19930301
PRAI	US 1990-460490		19900103		
	WO 1991-US5		19910103		
	US 1991-669846		19910315		

L4 ANSWER 97 OF 118 CAPLUS COPYRIGHT 2003 ACS
 AN 1991:400257 CAPLUS
 DN 115:257
 TI Potentiating effect of ribavirin on the in vitro and in vivo
 antiretrovirus activities of 2',3'-dideoxyinosine and 2',3'-dideoxy-2,6-
 diaminopurine riboside
 AU Balzarini, Jan; Naesens, Lieve; Robins, Morris J.; De Clercq, Erik
 CS Rega Inst. Med. Res., Cathol. Univ. Leuven, Louvain, B-3000, Belg.
 SO Journal of Acquired Immune Deficiency Syndromes (1990), 3(12), 1140-7
 CODEN: JAISSET; ISSN: 0894-9255
 DT Journal
 LA English

L4 ANSWER 98 OF 118 CAPLUS COPYRIGHT 2003 ACS
 AN 1991:177932 CAPLUS
 DN 114:177932
 TI Mechanism of action of Ribavirin on Bunyavirus infected cells
 AU Patterson, J. L.
 CS Child. Hosp. Corp., Boston, MA, USA
 SO Report (1989), Order No. AD-A218936, 13 pp. Avail.: NTIS
 From: Gov. Rep. Announce. Index (U. S.) 1990, 90(13), Abstr. No. 034,443
 DT Report
 LA English

L4 ANSWER 99 OF 118 CAPLUS COPYRIGHT 2003 ACS
 AN 1991:55350 CAPLUS
 DN 114:55350

TI Ribavirin is an inhibitor of human immunodeficiency virus reverse transcriptase
 AU Fernandez-Larsson, Roberto; Patterson, Jean L.
 CS Div. Infect. Dis., Child. Hosp., Boston, MA, 02115, USA
 SO Molecular Pharmacology (1990), 38(6), 766-70
 CODEN: MOPMA3; ISSN: 0026-895X
 DT Journal
 LA English

L4 ANSWER 100 OF 118 CAPLUS COPYRIGHT 2003 ACS
 AN 1990:604479 CAPLUS
 DN 113:204479
 TI Inhibitors of IMP dehydrogenase stimulate the phosphorylation of the antiviral nucleoside 2',3'-dideoxyguanosine
 AU Ahluwalia, Gurpreet; Cooney, David A.; Bondoc, Laureano L., Jr.; Currens, Michael J.; Ford, Harry; Johns, David G.; Mitsuya, Hiroaki; Fridland, Arnold
 CS Div. Cancer Treat., Natl. Cancer Inst., Bethesda, MD, 20892, USA
 SO Biochemical and Biophysical Research Communications (1990), 171(3), 1297-303
 CODEN: BBRCA9; ISSN: 0006-291X
 DT Journal
 LA English

L4 ANSWER 101 OF 118 CAPLUS COPYRIGHT 2003 ACS
 AN 1990:604470 CAPLUS
 DN 113:204470
 TI Virucidal activity of hypericin against enveloped and nonenveloped DNA and RNA viruses
 AU Tang, Joseph; Colacino, Joseph M.; Larsen, Stephen H.; Spitzer, Wayne
 CS Lilly Res. Lab., Indianapolis, IN, 46285, USA
 SO Antiviral Research (1990), 13(6), 313-25
 CODEN: ARSRDR; ISSN: 0166-3542
 DT Journal
 LA English

L4 ANSWER 102 OF 118 CAPLUS COPYRIGHT 2003 ACS
 AN 1990:503397 CAPLUS
 DN 113:103397
 TI Porphyrin and phthalocyanine antiviral compositions
 IN Schinazi, Raymond F.; Dixon, Dabney White; Marzilli, Luigi G.
 PA Georgia State University Foundation, Inc., USA
 SO PCT Int. Appl., 36 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	WO 8911277	A2	19891130	WO 1989-US2256	19890523
	WO 8911277	A3	19891228		
	W: AU, DK, FI, JP, KR, NO				
	RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
	US 5192788	A	19930309	US 1988-197764	19880523
	US 5109016	A	19920428	US 1989-355499	19890522
	AU 8938306	A1	19891212	AU 1989-38306	19890523
	US 5281616	A	19940125	US 1992-873415	19920424
PRAI	US 1988-197764		19880523		
	US 1989-355499		19890522		
	US 1989-355499		19890522		
	US 1989-355499		19890522		
	US 1989-355499		19890522		

US 1989-355499 19890522
WO 1989-US2256 19890523

L4 ANSWER 103 OF 118 CAPLUS COPYRIGHT 2003 ACS
AN 1990:217469 CAPLUS
DN 112:217469
TI Preparation of purine nucleosides as antiviral agents and pharmaceutical compositions containing them
IN Vince, Robert; Shannon, William M.
PA University of Minnesota, USA; Southern Research Institute
SO Eur. Pat. Appl., 27 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 346132	A1	19891213	EP 1989-305829	19890609
	EP 346132	B1	19920311		
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	DK 8902841	A	19891211	DK 1989-2841	19890609
	AU 8936272	A1	19891214	AU 1989-36272	19890609
	AU 627188	B2	19920820		
	JP 02091022	A2	19900330	JP 1989-145534	19890609
	ZA 8904392	A	19900829	ZA 1989-4392	19890609
	AT 73335	E	19920315	AT 1989-305829	19890609
	US 5122517	A	19920616	US 1990-611322	19901113
PRAI	US 1988-205163		19880610		
	US 1989-357137		19890530		
	EP 1989-305829		19890609		
OS	MARPAT 112:217469				

L4 ANSWER 104 OF 118 CAPLUS COPYRIGHT 2003 ACS
AN 1990:154865 CAPLUS
DN 112:154865
TI Diagnostics and therapy for rheumatoid arthritis
IN Gay, Steffen
PA USA
SO PCT Int. Appl., 38 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 8911285	A1	19891130	WO 1989-US2219	19890522
	W: JP				
	RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
	EP 378621	A1	19900725	EP 1989-906918	19890522
	R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
	JP 02504429	T2	19901213	JP 1989-506568	19890522
PRAI	US 1988-197554		19880523		
	WO 1989-US2219		19890522		

L4 ANSWER 105 OF 118 CAPLUS COPYRIGHT 2003 ACS
AN 1990:125216 CAPLUS
DN 112:125216
TI Reverse transcriptase inhibitors for treating adenocarcinomas
IN Hart, Charles Anthony; McCarthy, Kevin; Leinster, Samuel John; Green, Christopher Douglas; Al-Sumidaie, Ayad Mohamed Khala
PA University of Liverpool, UK
SO PCT Int. Appl., 28 pp.

CODEN: PIXXD2.

DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 8906132	A1	19890713	WO 1989-GB10	19890106
	W: AU, DK, JP, KR, US				
	CA 1331138	A1	19940802	CA 1989-587506	19890104
	ZA 8900093	A	19891025	ZA 1989-93	19890105
	AU 8929498	A1	19890801	AU 1989-29498	19890106
	AU 626284	B2	19920730		
	EP 327200	A1	19890809	EP 1989-300099	19890106
	EP 327200	B1	19921216		
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	JP 03503049	T2	19910711	JP 1989-501527	19890106
	JP 2761420	B2	19980604		
	AT 83378	E	19930115	AT 1989-300099	19890106
	CN 1034134	A	19890726	CN 1989-100192	19890107
	DK 9001621	A	19900705	DK 1990-1621	19900705
	DK 173766	B1	20010924		
	US 5223490	A	19930629	US 1990-536669	19900705
PRAI	GB 1988-276	A	19880107		
	EP 1989-300099	A	19890106		
	WO 1989-GB10	A	19890106		

L4 ANSWER 106 OF 118 CAPLUS COPYRIGHT 2003 ACS
AN 1990:125194 CAPLUS
DN 112:125194
TI Liposomal nucleoside analogs for treating AIDS
IN Hostetler, Karl Y.; Richman, Douglas D.
PA University of California, USA
SO PCT Int. Appl., 30 pp.
CODEN: PIXXD2

DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 8902733	A1	19890406	WO 1988-US3210	19880919
	W: AU, JP				
	RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
	AU 8825261	A1	19890418	AU 1988-25261	19880919
	EP 380558	A1	19900808	EP 1988-908811	19880919
	R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
	JP 03501253	T2	19910322	JP 1988-508005	19880919
PRAI	US 1987-99755		19870922		
	WO 1988-US3210		19880919		

L4 ANSWER 107 OF 118 CAPLUS COPYRIGHT 2003 ACS
AN 1989:572324 CAPLUS
DN 111:172324
TI Monoclonal antibodies neutralizing HIV-1, immunogenic peptides,
and their preparation and use in prophylaxis and treatment of HIV
-1 infection
IN Chang, Tse Wen; Fung, Sek C.; Sun, Cecily Rou Yun; Sun, Bill Nai Chau;
Chang, Nancy T.; Liou, Ruey Shyan; Rosen, Edward M.
PA Tanox Biosystems, Inc., USA; Baylor College of Medicine
SO PCT Int. Appl., 112 pp.
CODEN: PIXXD2
DT Patent
LA English

FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 8809181	A2	19881201	WO 1988-US1797	19880527
	WO 8809181	A3	19890209		
	W: JP				
	RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
	EP 366718	A1	19900509	EP 1988-906589	19880527
	EP 366718	B1	19950510		
	R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
	JP 03504556	T2	19911009	JP 1988-506387	19880527
	JP 2520464	B2	19960731		
	AT 122237	E	19950515	AT 1988-906589	19880527
	CA 1339857	A1	19980505	CA 1988-567904	19880527
PRAI	US 1987-57445		19870529		
	US 1987-137861		19871224		
	US 1988-197766		19880523		
	WO 1988-US1797		19880527		

L4 ANSWER 108 OF 118 CAPLUS COPYRIGHT 2003 ACS

AN 1989:490415 CAPLUS

DN 111:90415

TI Treatment of human viral infection by double-stranded RNA combined with viral inhibitors

IN Carter, William A.

PA Hem Research, Inc., USA

SO Eur. Pat. Appl., 10 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 286224	A2	19881012	EP 1988-301824	19880302
	EP 286224	A3	19881207		
	EP 286224	B1	19921125		
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	US 4950652	A	19900821	US 1987-125097	19871125
	AT 82688	E	19921215	AT 1988-301824	19880302
PRAI	US 1987-28823		19870323		
	US 1987-125097		19871125		
	EP 1988-301824		19880302		

L4 ANSWER 109 OF 118 CAPLUS COPYRIGHT 2003 ACS

AN 1989:489841 CAPLUS

DN 111:89841

TI Potentiating effect of ribavirin on the antiretrovirus activity of 3'-azido-2,6-diaminopurine-2',3'-dideoxyriboside in vitro and in vivo

AU Balzarini, Jan; Herdewijn, Piet; De Clercq, Erik

CS Rega Inst. Med. Res., Kathol. Univ. Leuven, Louvain, B-3000, Belg.

SO Antiviral Research (1989), 11(4), 161-71

CODEN: ARSRDR; ISSN: 0166-3542

DT Journal

LA English

L4 ANSWER 110 OF 118 CAPLUS COPYRIGHT 2003 ACS

AN 1989:489754 CAPLUS

DN 111:89754

TI Pharmacokinetics of ribavirin and urinary excretion of the major metabolite 1,2,4-triazole-3-carboxamide in normal volunteers

AU Paroni, R.; Del Puppo, M.; Borghi, C.; Sirtori, C. R.; Galli Kienle, M.

CS Ist. Sci. H. S. Raffaele, Milan, Italy

SO International Journal of Clinical Pharmacology, Therapy and Toxicology
(1989), 27(6), 302-7
CODEN: IJCPB5; ISSN: 0300-9718

DT Journal
LA English

L4 ANSWER 111 OF 118 CAPLUS COPYRIGHT 2003 ACS
AN 1989:400255 CAPLUS
DN 111:255
TI In vitro evaluation of mismatched double-stranded RNA (ampligen) for
combination therapy in the treatment of acquired immunodeficiency syndrome
AU Montefiori, David C.; Robinson, W. Edward, Jr.; Mitchell, William M.
CS Sch. Med., Vanderbilt Univ., Nashville, TN, 37232, USA
SO AIDS Research and Human Retroviruses (1989), 5(2), 193-203
CODEN: ARHRE7; ISSN: 0889-2229

DT Journal
LA English

L4 ANSWER 112 OF 118 CAPLUS COPYRIGHT 2003 ACS
AN 1989:225038 CAPLUS
DN 110:225038
TI Marked in vivo antiretrovirus activity of 9-(2-
phosphonylmethoxyethyl)adenine, a selective anti-human immunodeficiency
virus agent

AU Balzarini, Jan; Naesens, Lieve; Herdewijn, Piet; Rosenberg, Ivan; Holy,
Antonin; Pauwels, Rudi; Baba, Masanori; Johns, David G.; De Clercq, Erik
CS Rega Inst. Med. Res., Kathol. Univ. Leuven, Louvain, B-3000, Belg.
SO Proceedings of the National Academy of Sciences of the United States of
America (1989), 86(1), 332-6
CODEN: PNASA6; ISSN: 0027-8424

DT Journal
LA English

L4 ANSWER 113 OF 118 CAPLUS COPYRIGHT 2003 ACS
AN 1989:87836 CAPLUS
DN 110:87836
TI Use of continuous human T-lymphocyte H9 culture for screening of chemical
drugs inhibiting reproduction of human immunodeficiency virus

AU Nesterchuk, S. L.; Barinskii, I. F.
CS Inst. Virusol., Moscow, USSR
SO Voprosy Virusologii (1988), 33(5), 565-9
CODEN: VVIRAT; ISSN: 0507-4088

DT Journal
LA Russian

L4 ANSWER 114 OF 118 CAPLUS COPYRIGHT 2003 ACS
AN 1988:204991 CAPLUS
DN 108:204991
TI Synthesis of 2',3'-dideoxyribavirin

AU Sanghvi, Yogesh S.; Hanna, Naeem B.; Larson, Steven B.; Robins, Roland K.;
Revankar, Ganapathi R.
CS Nucleic Acid Res. Inst., Costa Mesa, CA, 92626, USA
SO Nucleosides & Nucleotides (1987), 6(4), 761-74
CODEN: NUNUD5; ISSN: 0732-8311

DT Journal
LA English
OS CASREACT 108:204991

L4 ANSWER 115 OF 118 CAPLUS COPYRIGHT 2003 ACS
AN 1988:31367 CAPLUS
DN 108:31367
TI Study of the effect of Soviet drugs, reafteron, and interferon inducers on

AIDS **retrovirus** reproduction

AU Barinskii, I. F.; Gribench, S. V.; Nesterchuk, S. L.; Zhdanov, V. M.
 CS Inst. Virusol. im. Ivanovskogo, Moscow, USSR
 SO Voprosy Virusologii (1987), 32(5), 561-5
 CODEN: VVIRAT; ISSN: 0507-4088
 DT Journal
 LA Russian

L4 ANSWER 116 OF 118 CAPLUS COPYRIGHT 2003 ACS
 AN 1987:628502 CAPLUS
 DN 107:228502
 TI Visna virus as an in vitro model for human immunodeficiency virus and inhibition by ribavirin, phosphonoformate, and 2',3'-dideoxynucleosides
 AU Frank, Karl B.; McKernan, Patricia A.; Smith, Roberts A.; Smee, Donald F.
 CS Nucleic Acid Res. Inst., Costa Mesa, CA, 92626, USA
 SO Antimicrobial Agents and Chemotherapy (1987), 31(9), 1369-74
 CODEN: AMACCQ; ISSN: 0066-4804
 DT Journal
 LA English

L4 ANSWER 117 OF 118 CAPLUS COPYRIGHT 2003 ACS
 AN 1987:590434 CAPLUS
 DN 107:190434
 TI Effect of ribamidil and phosphonoformic acid on reproduction in vitro of **retrovirus** HTLV-III
 AU Nesterchuk, S. L.; Gribench, S. V.; Barinskii, I. F.; Zhdanov, V. M.
 CS Inst. Virusol. im. Ivanovskogo, Moscow, USSR
 SO Voprosy Virusologii (1987), 32(3), 364-6
 CODEN: VVIRAT; ISSN: 0507-4088
 DT Journal
 LA Russian

L4 ANSWER 118 OF 118 CAPLUS COPYRIGHT 2003 ACS
 AN 1987:172809 CAPLUS
 DN 106:172809
 TI Ribavirin antagonizes the effect of azidothymidine on **HIV** replication
 AU Vogt, Markus W.; Hartshorn, Kevan L.; Furman, Phillip A.; Chou, Ting Chao; Fyfe, James A.; Coleman, Leslie A.; Crumacker, Clyde; Schooley, Robert T.; Hirsch, Martin S.
 CS Infect. Dis. Unit, Massachusetts Gen. Hosp., Boston, MA, 02114, USA
 SO Science (Washington, DC, United States) (1987), 235(4794), 1376-9
 CODEN: SCIEAS; ISSN: 0036-8075
 DT Journal
 LA English

=> d 14 99 all

L4 ANSWER 99 OF 118 CAPLUS COPYRIGHT 2003 ACS
 AN 1991:55350 CAPLUS
 DN 114:55350
 TI Ribavirin is an inhibitor of human immunodeficiency virus reverse transcriptase
 AU Fernandez-Larsson, Roberto; Patterson, Jean L.
 CS Div. Infect. Dis., Child. Hosp., Boston, MA, 02115, USA
 SO Molecular Pharmacology (1990), 38(6), 766-70
 CODEN: MOPMA3; ISSN: 0026-895X
 DT Journal
 LA English
 CC 1-5 (Pharmacology)
 AB Ribavirin inhibits the human immunodeficiency virus reverse transcriptase

in an in vitro reaction. Ribavirin-5'-diphosphate was close to 40% more inhibitory than ribavirin-5'-triphosphate. Unphosphorylated ribavirin had a reduced, but detectable, effect as an inhibitor, compared with the phosphorylated forms. The compds. seem to have a direct effect on the viral polymerase, and no chain termination was obsd. in the presence of ribavirin-5'-triphosphate. Combination of any of the ribavirin derivs. tested with 3'-azido-3'-deoxythymidine (zidovudine)-5'-triphosphate resulted in an increase of its anti-human immunodeficiency virus reverse transcriptase activity in the in vitro assay.

ST ribavirin **HIV** 1 reverse transcriptase inhibitor
 IT Virus, animal
 (human immunodeficiency 1, reverse transcriptase of, inhibition by
 ribavirin and phosphorylated ribavirin and zidovudine)
 IT Microbicidal and microbiostatic action
 (virucidal, of ribavirin and phosphorylated ribavirin and zidovudine)
 IT **36791-04-5**, Ribavirin **63142-70-1**, Ribavirin-5'-
 diphosphate **63142-71-2**, Ribavirin-5'-triphosphate
 RL: BIOL (Biological study)
 (**HIV**-1 reverse transcriptase inhibition by)
 IT 92586-35-1, Zidovudine-5'-triphosphate
 RL: BIOL (Biological study)
 (**HIV**-1 reverse transcriptase inhibition by phosphorylated
 ribavirin and)
 IT 9012-90-2, DNA polymerase 9068-38-6, Reverse transcriptase
 RL: BIOL (Biological study)
 (of **HIV**-1, inhibition by ribavirin and phosphorylated
 ribavirin and zidovudine)

=> d 14 79 all

L4 ANSWER 79 OF 118 CAPLUS COPYRIGHT 2003 ACS
 AN 1994:153741 CAPLUS
 DN 120:153741
 TI Use of antiretroviral drugs for treatment of motor neuron diseases
 IN Westarp, Martin Egon; Kornhuber, Hans Helmut
 PA Germany
 SO Ger. Offen., 6 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 IC ICM A61K031-70
 ICS A61K031-55; A61K031-505; A61K031-66; A61K031-445; A61K031-47
 ICI A61K031-70, A61K031-55, A61K031-505, A61K031-66, A61K031-445, A61K031-47
 CC 1-11 (Pharmacology)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 4307883	A1	19930923	DE 1993-4307883	19930312
PRAI	DE 1992-4207863		19920312		

AB Nucleoside analogs and other antiretroviral agents are useful for treatment of diseases of motor neurons, such as amyotrophic lateral sclerosis (ALS), spinal muscular atrophy, and progressive bulbar paralysis. Thus, administration of zidovudine (500 mg/day orally for 2-10 mo) to ALS patients reversed the elevation in serum creatine kinase level characteristic of ALS in 8 of 10 patients.

ST motor nerve disease treatment virucide; amyotrophic lateral sclerosis **retrovirus** drug; zidovudine nerve disease

IT Virucides and Virustats
 (for retroviruses, motor neuron disease treatment with)

IT Ribonucleic acids, viral
 RL: BIOL (Biological study)

(of **retrovirus**, antisense, motor neuron disease treatment with)

IT Virus, animal
(Maedi-Visna, antisense RNA of, motor neuron disease treatment with)

IT Paralysis
(bulbar, progressive, treatment of, with **retrovirus** inhibitors)

IT Nervous system
(disease, amyotrophic lateral sclerosis, treatment of, with **retrovirus** inhibitors)

IT Nervous system
(disease, spinal muscular atrophy, treatment of, with **retrovirus** inhibitors)

IT Virus, animal
(foamy, antisense RNA of, motor neuron disease treatment with)

IT Nerve, disease
(motor, treatment of, with **retrovirus** inhibitors)

IT Virus, animal
(retro-, inhibitors of, motor neuron disease treatment with)

IT Proteins, specific or class
RL: BIOL (Biological study)
(trichosanthins, motor neuron disease treatment with)

IT 9068-38-6, Reverse transcriptase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibitors, motor neuron disease treatment with)

IT 50-48-6, Amitriptyline 52-67-5 53-43-0, Dehydroepiandrosterone
70-00-8, Trifluorothymidine 360-97-4, 5-Aminoimidazole-4-carboxamide
548-04-9, Hypericin 616-91-1, N-Acetylcysteine 1077-28-7 1077-28-7,
1,2-Dithiolane-3-pentanoic acid 3056-17-5 4317-14-0, Amitriptyline
oxide 4408-78-0, Phosphonoacetic acid 4428-95-9, Foscarnet
6493-05-6, Pentoxifylline 6736-58-9, 3-Deazaadenosine 7481-89-2,
Dideoxycytidine 9042-14-2, Dextran sulfate 16561-29-8 19130-96-2,
Deoxynojirimycin 19750-45-9 30195-30-3 30516-87-1, Azidothymidine
36791-04-5, Ribavirin 58821-98-0, 12-Deoxyphorbol
13-phenylacetate 59372-48-4, Ammonium antimony tungsten oxide
60857-08-1, 12-Deoxyphorbol 13-acetate 69655-05-6, Dideoxyinosine
72599-27-0 112190-24-6, U-75875 123027-56-5 126347-69-1, R82913
127779-20-8 127875-60-9, A-80915A 129618-40-2, Nevirapine
132774-45-9 132774-46-0 134458-76-7 134678-17-4 134680-32-3
136816-67-6 136816-72-3, U 85961 136816-75-6, U 87201 136816-75-6D,
U 87201, esters 136816-76-7, U 88204 136816-84-7, U 88352
136816-85-8, U 88353 136891-12-8 137622-85-6 140459-12-7,
Fluorothymidine 143616-58-4 147362-54-7, R 18893 148465-15-0, L697
153374-32-4 153411-01-9 153550-37-9, L 661
RL: BIOL (Biological study)
(motor neuron disease treatment with)

=> d 14 97 all

L4 ANSWER 97 OF 118 CAPLUS COPYRIGHT 2003 ACS
AN 1991:400257 CAPLUS
DN 115:257
TI Potentiating effect of ribavirin on the in vitro and in vivo
antiretrovirus activities of 2',3'-dideoxyinosine and 2',3'-dideoxy-2,6-
diaminopurine riboside
AU Balzarini, Jan; Naesens, Lieve; Robins, Morris J.; De Clercq, Erik
CS Rega Inst. Med. Res., Cathol. Univ. Leuven, Louvain, B-3000, Belg.
SO Journal of Acquired Immune Deficiency Syndromes (1990), 3(12), 1140-7
CODEN: JAISSET; ISSN: 0894-9255
DT Journal
LA English

CC 1-5 (Pharmacology)

AB The nucleoside analogs, 2',3'-dideoxyinosine (DDI) and 2',3'-dideoxy-2,6-diaminopurine riboside (ddDAPR) are potent and selective inhibitors of human immunodeficiency virus (HIV) replication in MT-4 cells. They are also inhibitory to the transformation of C3H/3T3 cells by Moloney murine sarcoma virus (MSV). In vivo, they are only marginally effective in delaying MSV-induced tumor formation, and mortality assocd. therewith in newborn NMRI mice. When combined with ribavirin, DDI and ddDAPR become much more effective in inhibiting MSV and HIV replication in vitro and MSV-induced tumor formation in vivo. These observations point to the potential role of ribavirin in the treatment of **retrovirus** infections, particularly in potentiating the anti-HIV activity of DDI in AIDS patients.

ST ribavirin deoxynucleoside **retrovirus** inhibition; human immunodeficiency virus inhibition ribavirin deoxynucleoside; HIV inhibition ribavirin deoxynucleoside

IT Virucides and Virustats
(dideoxynucleoside-ribavirin combinations as, against **retrovirus**, in human and lab. animal cells)

IT Nucleosides, biological studies
RL: BIOL (Biological study)
(dideoxy, **retrovirus** inhibition by ribavirin and, in human and lab. animal cells)

IT Virus, animal
(human immunodeficiency 1, inhibition of, by dideoxynucleoside-ribavirin combinations, in human cells)

IT Virus, animal
(retro-, inhibition of, by dideoxynucleoside-ribavirin combinations, in human and lab. animal cells)

IT 36791-04-5, Ribavirin
RL: BIOL (Biological study)
(**retrovirus** inhibition by dideoxynucleosides and, in human and lab. animal cells)

IT 69655-05-6, 2',3'-Dideoxyinosine 107550-73-2
RL: BIOL (Biological study)
(**retrovirus** inhibition by ribavirin and, in human and lab. animal cells)

=> d his

(FILE 'HOME' ENTERED AT 15:19:12 ON 25 JUN 2003)

FILE 'REGISTRY' ENTERED AT 15:19:20 ON 25 JUN 2003

L1 17 S RIBAVIRIN

FILE 'CAPLUS' ENTERED AT 15:19:41 ON 25 JUN 2003

L2 1626 S L1

L3 66831 S HIV OR RETROVIRAL OR RETROVIRUS

L4 118 S L2 AND L3

=>

---Logging off of STN---

=>

Executing the logoff script...

=> LOG Y

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	46.73	51.56

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-1.95	-1.95

STN INTERNATIONAL LOGOFF AT 15:25:29 ON 25 JUN 2003

AN 1990:604479 CAPLUS
 DN 113:204479
 TI Inhibitors of IMP dehydrogenase stimulate the phosphorylation of the
 antiviral nucleoside 2',3'-dideoxyguanosine
 AU Ahluwalia, Gurpreet; Cooney, David A.; Bondoc, Laureano L., Jr.; Currens,
 Michael J.; Ford, Harry; Johns, David G.; Mitsuya, Hiroaki; Fridland,
 Arnold
 CS Div. Cancer Treat., Natl. Cancer Inst., Bethesda, MD, 20892, USA
 SO Biochemical and Biophysical Research Communications (1990), 171(3),
 1297-303
 CODEN: BBRCA9; ISSN: 0006-291X
 DT Journal
 LA English
 CC 1-5 (Pharmacology)
 AB The inosinate dehydrogenase (IMPD) inhibitors ribavirin, tiazofurin and
 mycophenolic acid were found to stimulate by as much as 20-fold the
 anabolism of the anti-**HIV** agent 2',3'-dideoxyguanosine to its
 5'-diphosphate (ddGDP) in a human T-cell culture system (Molt-4 cells).
 Stimulation of the further conversion to ddGTP (the active form of the
 drug) was lesser in magnitude but still highly significant (up to 4-fold
 at appropriate concns. of ribavirin or tiazofurin). In parallel with
 these increases, the inhibitors also produced increases of up to 35-fold
 in IMP levels. These results support the proposal that the initial
 phosphorylation of ddGuo is catalyzed by a phosphotransferase
 (5'-nucleotidase) which utilizes IMP as its phosphate donor (Johnson and
 Fridland, [1989] Molec. Pharmacol. 36, 291-295). Concomitant with this
 increase in 5'-phosphorylation of ddGuo, an increase in its anti-
HIV activity of up to 6.5-fold was obsd. when this agent was
 combined with ribavirin (5.mu.M) in the CEM cell assay system.
 ST antiviral nucleoside phosphorylation IMP dehydrogenase inhibitor;
 inhibition dideoxyguanosine IMP dehydrogenase inhibitor
 IT Lymphocyte
 (T-, dideoxyguanosine phosphorylation by human, IMP dehydrogenase
 inhibitors stimulation of, **HIV** inhibition in relation to)
 IT Virus, animal
 (human immunodeficiency 1, III.beta., inhibition of, by
 dideoxyguanosine and IMP dehydrogenase inhibitors, in human
 T-lymphocytes)
 IT Microbicidal and microbiostatic action
 (virucidal, of dideoxyguanosine and IMP dehydrogenase inhibitors, in
 human T-lymphocytes)
 IT 68726-28-3 84328-12-1 85956-71-4
 RL: BIOL (Biological study)
 (as dideoxyguanosine metabolite, in human T-lymphocytes, IMP
 dehydrogenase inhibitors effect on)
 IT 24280-93-1, NSC 129185 36791-04-5, NSC 163039 60084-10-8, NSC
 286193
 RL: BIOL (Biological study)
 (dideoxyguanosine phosphorylation by T-lymphocytes of humans
 stimulation by, **HIV** inhibition in relation to)
 IT 9028-93-7, IMP dehydrogenase
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (inhibitors, dideoxyguanosine phosphorylation by T-lymphocytes of
 humans stimulation by, **HIV** inhibition in relation to)
 IT 131-99-7, IMP
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
 (Biological study); PROC (Process)
 (metab. of, by T-lymphocytes of humans, dideoxyguanosine metab.
 response to IMP dehydrogenase inhibitors in relation to)
 IT 85326-06-3
 RL: BIOL (Biological study)
 (phosphorylation of, by T-lymphocytes of humans, IMP dehydrogenase

inhibitors stimulation of, **HIV** inhibition in relation to)

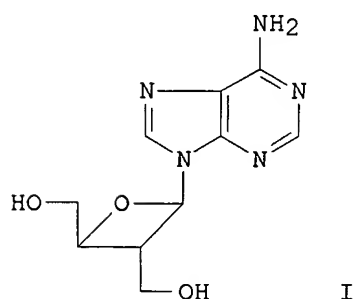
=>

AN 1990:604479 CAPLUS
 DN 113:204479
 TI Inhibitors of IMP dehydrogenase stimulate the phosphorylation of the
 antiviral nucleoside 2',3'-dideoxyguanosine
 AU Ahluwalia, Gurpreet; Cooney, David A.; Bondoc, Laureano L., Jr.; Currens,
 Michael J.; Ford, Harry; Johns, David G.; Mitsuya, Hiroaki; Fridland,
 Arnold
 CS Div. Cancer Treat., Natl. Cancer Inst., Bethesda, MD, 20892, USA
 SO Biochemical and Biophysical Research Communications (1990), 171(3),
 1297-303
 CODEN: BBRCA9; ISSN: 0006-291X
 DT Journal
 LA English
 CC 1-5 (Pharmacology)
 AB The inosinate dehydrogenase (IMPD) inhibitors ribavirin, tiazofurin and
 mycophenolic acid were found to stimulate by as much as 20-fold the
 anabolism of the anti-HIV agent 2',3'-dideoxyguanosine to its
 5'-diphosphate (ddGDP) in a human T-cell culture system (Molt-4 cells).
 Stimulation of the further conversion to ddGTP (the active form of the
 drug) was lesser in magnitude but still highly significant (up to 4-fold
 at appropriate concns. of ribavirin or tiazofurin). In parallel with
 these increases, the inhibitors also produced increases of up to 35-fold
 in IMP levels. These results support the proposal that the initial
 phosphorylation of ddGuo is catalyzed by a phosphotransferase
 (5'-nucleotidase) which utilizes IMP as its phosphate donor (Johnson and
 Fridland, [1989] Molec. Pharmacol. 36, 291-295). Concomitant with this
 increase in 5'-phosphorylation of ddGuo, an increase in its anti-
 HIV activity of up to 6.5-fold was obsd. when this agent was
 combined with ribavirin (5.mu.M) in the CEM cell assay system.
 ST antiviral nucleoside phosphorylation IMP dehydrogenase inhibitor;
 inhibition dideoxyguanosine IMP dehydrogenase inhibitor
 IT Lymphocyte
 (T-, dideoxyguanosine phosphorylation by human, IMP dehydrogenase
 inhibitors stimulation of, HIV inhibition in relation to)
 IT Virus, animal
 (human immunodeficiency 1, III.beta., inhibition of, by
 dideoxyguanosine and IMP dehydrogenase inhibitors, in human
 T-lymphocytes)
 IT Microbicidal and microbiostatic action
 (virucidal, of dideoxyguanosine and IMP dehydrogenase inhibitors, in
 human T-lymphocytes)
 IT 68726-28-3 84328-12-1 85956-71-4
 RL: BIOL (Biological study)
 (as dideoxyguanosine metabolite, in human T-lymphocytes, IMP
 dehydrogenase inhibitors effect on)
 IT 24280-93-1, NSC 129185 36791-04-5, NSC 163039 60084-10-8, NSC
 286193
 RL: BIOL (Biological study)
 (dideoxyguanosine phosphorylation by T-lymphocytes of humans
 stimulation by, HIV inhibition in relation to)
 IT 9028-93-7, IMP dehydrogenase
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (inhibitors, dideoxyguanosine phosphorylation by T-lymphocytes of
 humans stimulation by, HIV inhibition in relation to)
 IT 131-99-7, IMP
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
 (Biological study); PROC (Process)
 (metab. of, by T-lymphocytes of humans, dideoxyguanosine metab.
 response to IMP dehydrogenase inhibitors in relation to)
 IT 85326-06-3
 RL: BIOL (Biological study)
 (phosphorylation of, by T-lymphocytes of humans, IMP dehydrogenase

inhibitors stimulation of, **HIV** inhibition in relation to)

=>

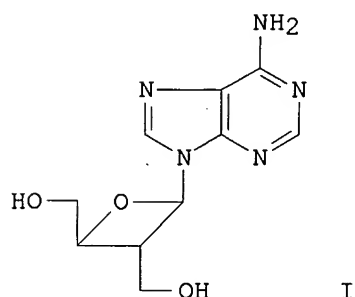
AN 1989:449969 CAPLUS
 DN 111:49969
 TI Inhibition of infectivity of human immunodeficiency virus by a novel nucleoside, oxetanocin, and related compounds
 AU Seki, Junichi; Shimada, Nobuyoshi; Takahashi, Katsutoshi; Takita, Tomohisa; Takeuchi, Tomio; Hoshino, Hiroo
 CS Sch. Med., Gunma Univ., Maebashi, 371, Japan
 SO Antimicrobial Agents and Chemotherapy (1989), 33(5), 773-5
 CODEN: AMACCQ; ISSN: 0066-4804
 DT Journal
 LA English
 CC 1-5 (Pharmacology)
 GI



AB Oxetanocin A (I) is a novel nucleoside contg. a 4-membered sugar, oxetanosyl-N-glycoside, and adenine. The effects of oxetanocin and related compds. on the infectivity of human immunodeficiency virus (**HIV**) were examd. They inhibited **HIV** infectivity in vitro. Allopurinol and mycophenolic acid produced additive anti-**HIV** effects when added with these compds.
 ST oxetanocin analog human immunodeficiency virus
 IT Virus, animal
 (human immunodeficiency 1, inhibition of, by oxetanocin analogs, allopurinol and mycophenolic acid enhancement of)
 IT 315-30-0 **24280-93-1**, Mycophenolic acid
 RL: BIOL (Biological study)
 (human immunodeficiency virus inhibition by oxetanocin analogs enhancement by)
 IT 103913-16-2 113269-44-6 113269-45-7 113269-46-8 113296-23-4
 RL: BIOL (Biological study)
 (human immunodeficiency virus inhibition by, allopurinol and mycophenolic acid enhancement of)

=>

AN 1989:449969 CAPLUS
 DN 111:49969
 TI Inhibition of infectivity of human immunodeficiency virus by a novel
 nucleoside, oxetanocin, and related compounds
 AU Seki, Junichi; Shimada, Nobuyoshi; Takahashi, Katsutoshi; Takita,
 Tomohisa; Takeuchi, Tomio; Hoshino, Hiroo
 CS Sch. Med., Gunma Univ., Maebashi, 371, Japan
 SO Antimicrobial Agents and Chemotherapy (1989), 33(5), 773-5
 CODEN: AMACQ; ISSN: 0066-4804
 DT Journal
 LA English
 CC 1-5 (Pharmacology)
 GI



AB Oxetanocin A (I) is a novel nucleoside contg. a 4-membered sugar,
 oxetanosyl-N-glycoside, and adenine. The effects of oxetanocin and
 related compds. on the infectivity of human immunodeficiency virus (
HIV) were examd. They inhibited **HIV** infectivity in
 vitro. Allopurinol and mycophenolic acid produced additive anti-
HIV effects when added with these compds.
 ST oxetanocin analog human immunodeficiency virus
 IT Virus, animal
 (human immunodeficiency 1, inhibition of, by oxetanocin analogs,
 allopurinol and mycophenolic acid enhancement of)
 IT 315-30-0 **24280-93-1**, Mycophenolic acid
 RL: BIOL (Biological study)
 (human immunodeficiency virus inhibition by oxetanocin analogs
 enhancement by)
 IT 103913-16-2 113269-44-6 113269-45-7 113269-46-8 113296-23-4
 RL: BIOL (Biological study)
 (human immunodeficiency virus inhibition by, allopurinol and
 mycophenolic acid enhancement of)

=>

AN 1991:400257 CAPLUS
 DN 115:257
 TI Potentiating effect of ribavirin on the in vitro and in vivo
 antiretrovirus activities of 2',3'-dideoxyinosine and 2',3'-dideoxy-2,6-
 diaminopurine riboside
 AU Balzarini, Jan; Naesens, Lieve; Robins, Morris J.; De Clercq, Erik
 CS Rega Inst. Med. Res., Cathol. Univ. Leuven, Louvain, B-3000, Belg.
 SO Journal of Acquired Immune Deficiency Syndromes (1990), 3(12), 1140-7
 CODEN: JAISSET; ISSN: 0894-9255
 DT Journal
 LA English
 CC 1-5 (Pharmacology)
 AB The nucleoside analogs, 2',3'-dideoxyinosine (DDI) and
 2',3'-dideoxy-2,6-diaminopurine riboside (ddDAPR) are potent and selective
 inhibitors of human immunodeficiency virus (**HIV**) replication in
 MT-4 cells. They are also inhibitory to the transformation of C3H/3T3
 cells by Moloney murine sarcoma virus (MSV). In vivo, they are only
 marginally effective in delaying MSV-induced tumor formation, and
 mortality assocd. therewith in newborn NMRI mice. When combined with
 ribavirin, DDI and ddDAPR become much more effective in inhibiting MSV and
HIV replication in vitro and MSV-induced tumor formation in vivo.
 These observations point to the potential role of ribavirin in the
 treatment of **retrovirus** infections, particularly in potentiating
 the anti-**HIV** activity of DDI in AIDS patients.
 ST ribavirin deoxynucleoside **retrovirus** inhibition; human
 immunodeficiency virus inhibition ribavirin deoxynucleoside; **HIV**
 inhibition ribavirin deoxynucleoside
 IT Virucides and Virustats
 (dideoxynucleoside-ribavirin combinations as, against
retrovirus, in human and lab. animal cells)
 IT Nucleosides, biological studies
 RL: BIOL (Biological study)
 (dideoxy, **retrovirus** inhibition by ribavirin and, in human
 and lab. animal cells)
 IT Virus, animal
 (human immunodeficiency 1, inhibition of, by dideoxynucleoside-
 ribavirin combinations, in human cells)
 IT Virus, animal
 (retro-, inhibition of, by dideoxynucleoside-ribavirin combinations, in
 human and lab. animal cells)
 IT 36791-04-5, Ribavirin
 RL: BIOL (Biological study)
 (**retrovirus** inhibition by dideoxynucleosides and, in human
 and lab. animal cells)
 IT 69655-05-6, 2',3'-Dideoxyinosine 107550-73-2
 RL: BIOL (Biological study)
 (**retrovirus** inhibition by ribavirin and, in human and lab.
 animal cells)

=>

AN 1991:400257 CAPLUS
 DN 115:257
 TI Potentiating effect of ribavirin on the in vitro and in vivo
 antiretrovirus activities of 2',3'-dideoxyinosine and 2',3'-dideoxy-2,6-
 diaminopurine riboside
 AU Balzarini, Jan; Naesens, Lieve; Robins, Morris J.; De Clercq, Erik
 CS Rega Inst. Med. Res., Cathol. Univ. Leuven, Louvain, B-3000, Belg.
 SO Journal of Acquired Immune Deficiency Syndromes (1990), 3(12), 1140-7
 CODEN: JAISET; ISSN: 0894-9255
 DT Journal
 LA English
 CC 1-5 (Pharmacology)
 AB The nucleoside analogs, 2',3'-dideoxyinosine (DDI) and
 2',3'-dideoxy-2,6-diaminopurine riboside (ddDAPR) are potent and selective
 inhibitors of human immunodeficiency virus (**HIV**) replication in
 MT-4 cells. They are also inhibitory to the transformation of C3H/3T3
 cells by Moloney murine sarcoma virus (MSV). In vivo, they are only
 marginally effective in delaying MSV-induced tumor formation, and
 mortality assocd. therewith in newborn NMRI mice. When combined with
 ribavirin, DDI and ddDAPR become much more effective in inhibiting MSV and
HIV replication in vitro and MSV-induced tumor formation in vivo.
 These observations point to the potential role of ribavirin in the
 treatment of **retrovirus** infections, particularly in potentiating
 the anti-**HIV** activity of DDI in AIDS patients.
 ST ribavirin deoxynucleoside **retrovirus** inhibition; human
 immunodeficiency virus inhibition ribavirin deoxynucleoside; **HIV**
 inhibition ribavirin deoxynucleoside
 IT Virucides and Virustats
 (dideoxynucleoside-ribavirin combinations as, against
retrovirus, in human and lab. animal cells)
 IT Nucleosides, biological studies
 RL: BIOL (Biological study)
 (dideoxy, **retrovirus** inhibition by ribavirin and, in human
 and lab. animal cells)
 IT Virus, animal
 (human immunodeficiency 1, inhibition of, by dideoxynucleoside-
 ribavirin combinations, in human cells)
 IT Virus, animal
 (retro-, inhibition of, by dideoxynucleoside-ribavirin combinations, in
 human and lab. animal cells)
 IT 36791-04-5, Ribavirin
 RL: BIOL (Biological study)
 (**retrovirus** inhibition by dideoxynucleosides and, in human
 and lab. animal cells)
 IT 69655-05-6, 2',3'-Dideoxyinosine 107550-73-2
 RL: BIOL (Biological study)
 (**retrovirus** inhibition by ribavirin and, in human and lab.
 animal cells)

=>

AN 1991:55350 CAPLUS
 DN 114:55350
 TI Ribavirin is an inhibitor of human immunodeficiency virus reverse transcriptase
 AU Fernandez-Larsson, Roberto; Patterson, Jean L.
 CS Div. Infect. Dis., Child. Hosp., Boston, MA, 02115, USA
 SO Molecular Pharmacology (1990), 38(6), 766-70
 CODEN: MOPMA3; ISSN: 0026-895X
 DT Journal
 LA English
 CC 1-5 (Pharmacology)
 AB Ribavirin inhibits the human immunodeficiency virus reverse transcriptase in an in vitro reaction. Ribavirin-5'-diphosphate was close to 40% more inhibitory than ribavirin-5'-triphosphate. Unphosphorylated ribavirin had a reduced, but detectable, effect as an inhibitor, compared with the phosphorylated forms. The compds. seem to have a direct effect on the viral polymerase, and no chain termination was obsd. in the presence of ribavirin-5'-triphosphate. Combination of any of the ribavirin derivs. tested with 3'-azido-3'-deoxythymidine (zidovudine)-5'-triphosphate resulted in an increase of its anti-human immunodeficiency virus reverse transcriptase activity in the in vitro assay.
 ST ribavirin **HIV** 1 reverse transcriptase inhibitor
 IT Virus, animal
 (human immunodeficiency 1, reverse transcriptase of, inhibition by ribavirin and phosphorylated ribavirin and zidovudine)
 IT Microbicidal and microbiostatic action
 (virucidal, of ribavirin and phosphorylated ribavirin and zidovudine)
 IT **36791-04-5**, Ribavirin **63142-70-1**, Ribavirin-5'-diphosphate **63142-71-2**, Ribavirin-5'-triphosphate
 RL: BIOL (Biological study)
 (**HIV**-1 reverse transcriptase inhibition by)
 IT 92586-35-1, Zidovudine-5'-triphosphate
 RL: BIOL (Biological study)
 (**HIV**-1 reverse transcriptase inhibition by phosphorylated ribavirin and)
 IT 9012-90-2, DNA polymerase 9068-38-6, Reverse transcriptase
 RL: BIOL (Biological study)
 (of **HIV**-1, inhibition by ribavirin and phosphorylated ribavirin and zidovudine)

=>

DN 123:160186
 TI Polymerase substrate depletion: a novel strategy for inhibiting the replication of the human immunodeficiency virus
 AU Ichimura, Hiroshi; Levy, Jay A.
 CS Cancer Res. Inst., Univ. California, San Francisco, CA, 94143, USA
 SO Virology (1995), 211(2), 554-60
 CODEN: VIRLAX; ISSN: 0042-6822
 PB Academic
 DT Journal
 LA English
 CC 1-5 (Pharmacology)
 AB Mycophenolic acid (MPA), an inhibitor of inosine monophosphate dehydrogenase, shows strong anti-**HIV** activity in vitro in both human peripheral blood CD4+ lymphocytes and macrophages, as well as established human cell lines. MPA shows its greatest antiviral effects during the early stages of **HIV** infection. By limiting the rate of de novo synthesis of guanosine nucleotides, this drug apparently blocks the activity of reverse transcriptase, which is required for the formation of the **HIV** DNA provirus. MPA provides a novel strategy for inhibiting the replication of **HIV** and should be considered in clin. trials of antiviral therapies.
 ST polymerase substrate depletion **HIV** replication; mycophenolic acid **HIV** inhibition reverse transcriptase
 IT Blood
 Lymphocyte
 Macrophage
 Virucides and Virustats
 (**HIV**-1 reverse transcriptase inhibition and polymerase substrate depletion by mycophenolic acid)
 IT Nucleotides, biological studies
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (inhibition of guanosine nucleotides by mycophenolic acid and anti-**HIV**-1 activity)
 IT Virus, animal
 (human immunodeficiency 1, **HIV**-1 reverse transcriptase inhibition and polymerase substrate depletion by mycophenolic acid)
 IT 24280-93-1, Mycophenolic acid
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (**HIV**-1 reverse transcriptase inhibition and polymerase substrate depletion by mycophenolic acid)
 IT 9068-38-6, Reverse transcriptase
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (**HIV**-1 reverse transcriptase inhibition and polymerase substrate depletion by mycophenolic acid)
 IT 118-00-3D, Guanosine, nucleotides
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (inhibition of guanosine nucleotides by mycophenolic acid and anti-**HIV**-1 activity)

=>